Utility Solid Waste Activities Group
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USWAG

April 4, 2012

VIA ELECTRONIC AND U.S. MAIL

Ms. Suzanne Rudzinski, Director
Office of Resource Conservation and Recovery
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 5301P
Washington, DC 20460

RE: Application for Risk-Based Disposal Approval for < 50 ppm PCB Remediation Wastes from Electric and Natural Gas Utility Operations

Dear Ms. Rudzinski:

The Utility Solid Waste Activities Group ("USWAG")[1] submits this application on behalf of its members for a risk-based disposal approval pursuant to 40 C.F.R. § 761.61(c) seeking approval to dispose of PCB Remediation Wastes[2] generated at secure utility assets with as-found concentrations of < 50 ppm PCBs in non-TSCA units, including municipal solid waste landfills ("MSWLFs"). The Agency has already determined that disposal of < 50 ppm PCBs in a non-TSCA unit, as contemplated in this application, will not pose an unreasonable risk of injury to health or the environment. This determination is expressed in a number of EPA documents and is evident in the fact that EPA currently authorizes PCB Remediation Wastes with as-found concentration of < 50 ppm generated under the self-implementing cleanup provision (40 C.F.R. § 761.61(a)) – but otherwise identical to the wastes that are the subject of this application – to be disposed of in MSWLFs and other non-TSCA units based on the actual (as-found) concentration of the PCB wastes.

This approved application will facilitate cleanups of PCB spills while utilizing the significant technical expertise acquired by electric and gas utilities through their decades of

[1] USWAG is an association of energy industry operating companies and associations, including the Edison Electric Institute ("EEI"), the American Gas Association ("AGA"), the American Public Power Association ("APPA"), and the National Rural Electric Cooperative Association ("NRECA"). Each current member of USWAG as of the date of this application, as listed in Attachment A to this application, constitutes an "Applicant," and a "person" within the meaning of 40 C.F.R. § 761.61(c). In this application, we refer to the applicants generally as the "utilities" or the "utility industry." These terms are intended to include those USWAG members listed in Attachment A that generate electricity but do not directly provide electricity to the public and are technically not "utilities."

[2] The term "Remediation Waste" is used throughout this application to refer to wastes defined as *PCB Remediation Waste* in 40 C.F.R. § 761.3.

experience with the PCB management and disposal regulations.[3] PCB remediation projects are complicated by the significant operational and cost impacts associated with the disposal of contaminated media, including especially the costs of disposing of wastes containing < 50 ppm PCBs in TSCA landfills. The granting of this application will provide immediate practical relief by removing these unnecessary cost and operational burdens on PCB remediation projects, without increasing exposure risks or adverse environmental impacts.

The elements of the risk-based disposal application, which applies only to disposal of PCB Remediation Wastes and not to cleanup of sites, are set forth below, followed by a discussion of EPA's previous statements and regulatory actions demonstrating that the requested disposal approval would not pose an unreasonable risk to human health or the environment.

I. Elements of the Risk-Based Disposal Approval

A. ***Applicability***: Applicants may dispose of PCB remediation wastes with as-found concentrations of < 50 ppm PCBs[4] in non-TSCA disposal units, including MSWLFs, provided (1) the conditions described in Section I of this application are satisfied, and (2) the PCB Remediation Waste is generated at a utility-owned, -operated, or -controlled secure asset. An asset is considered "secure" within the meaning of this application if it is fenced, locked, guarded/monitored, or otherwise not accessible to the general public. Secure utility-owned/operated/controlled assets include, for example, service centers, substations, switch-yards, power generating stations, network vaults, gas utility distribution centers, and natural gas metering, regulating, and compressor stations and service centers. These locations are not accessible to the general public and PCB response actions conducted within these areas are performed by, or under the supervision of, utility professionals and/or consultants with experience in responding to and remediating PCB releases.

B. ***Notification***: Notification will be provided to the appropriate EPA Regional PCB Coordinator before the waste leaves the control of the Applicant unless an applicable federal or state law, regulation, or approval requires earlier notification. Applicants using the approval will submit notification to the appropriate EPA Regional PCB Coordinator by phone, fax, email, or certified mail using the attached form (Attachment B). The notification will contain the following information: (1) company name and address; (2) name and phone number of primary company contact; and (3) cleanup site location (street address, city, county, and state). PCB

[3] By submitting this application, USWAG does not waive its legal position that the regulations already authorize the disposal of PCB Remediation Wastes with as-found concentrations of < 50 ppm in non-TSCA landfills. *See e.g.,* August 6, 2007 letter to Roger Martella, then-General Counsel of EPA setting forth USWAG's position as to why the existing regulations *already* allow for disposal of *all* PCB Remediation Wastes with as-found concentrations of < 50 ppm PCBs in non-TSCA landfills

[4] In the case of a PCB remediation waste comprised of a non-porous surface, the as-found PCB concentration on the surface shall be ≤ 10 ug/100 cm2. The reference to < 50 ppm PCB remediation wastes in this application includes PCB remediation waste consisting of non-porous surfaces with a surface PCB contamination of ≤ 10 ug/100 cm2.

Remediation Wastes managed in accordance with the conditions of this approval shall not be subject to the requirements of 40 C.F.R. § 761.65 or Subparts J and K of 40 C.F.R. Part 761.

C. ***Recordkeeping***: For every disposal activity undertaken in accordance with this approval, the applicant shall document the disposal activities with records that shall be maintained on-site, or at an appropriate facility owned or operated by the applicant, for a period of 5 years following the disposal, and shall make such records available upon request from EPA. The records shall consist of the following: (1) a copy of the notification form submitted to EPA under paragraph (B) of this section; (2) a brief description of the waste disposed of (*e.g.*, concrete, soil); (3) approximate amount of waste disposed of; (4) a brief description of the sampling methodology used to confirm as-found PCB concentrations of the waste; (4) and identification of the ultimate disposition of the waste (*i.e.*, name and location of MSWLF or other disposal site).

D. ***Waste Characterization***: Applicants managing < 50 ppm PCB Remediation Wastes under the disposal approval will verify through sampling that the wastes in fact contain as-found PCB concentrations of < 50 ppm. The entity utilizing the approval will sample in accordance with any of the following federal guidance as applicable: for PCB remediation waste consisting of concrete, in accordance with EPA Region I guidance, "Standard Operating Procedure for Sampling Concrete in the Field" (dated 12/30/97)); for bulk PCB remediation wastes and porous surfaces, in accordance with the methods set forth in 40 C.F.R. §§ 761.130(a)-(e) or 761.265; for PCB remediation wastes consisting of non-porous surfaces, in accordance with the procedures for a standard wipe test as specified in 40 C.F.R. § 761.123; and/or according to other applicable sampling procedures approved by EPA.

Chemical analysis for PCBs will be conducted in accordance with the most current extraction version of EPA Methods 3500, 3540, 3541, 3545 and 3550 in EPA's SW-846; and analyzed using the most current version of EPA Method 8082 in EPA's SW-846.

E. ***Disposal options***: The approval will allow for < 50 ppm PCB Remediation Wastes to be disposed of in any of the following facilities: (1) facilities permitted, licensed, or registered by a state to manage municipal solid waste subject to 40 C.F.R. Part 258; (2) facilities permitted, licensed, or registered by a state to manage non-municipal non-hazardous waste subject to 40 C.F.R. §§ 257.5–257.30, as applicable, including, as appropriate, recommendations in EPA's Guide for Industrial Waste Management; (3) a RCRA-permitted hazardous waste landfill; (4) an approved PCB disposal facility; or (5) a facility permitted or licensed by a state or otherwise authorized by a state to manage waste with as-found concentrations of < 50 ppm PCBs.

F. ***Cleanup Equipment***: Applicants operating under this approval will ensure that equipment used for conducting cleanup or waste sampling which is contaminated

with, or has been in contact with, PCB remediation waste, as well as non-liquid cleaning materials and personal protective equipment are managed according to the requirements of 40 C.F.R. § 761.61(a)(5)(v).

G. ***Regulatory Compliance***: Nothing in the approval relieves applicants of any obligations to comply with all other rules and regulations applicable to the activities subject to the approval.

H. ***Duration of Approval***: The approval will remain in effect for a period of five (5) years from its effective date. USWAG may request an extension of the approval on behalf of its members at least nine (9) months before the end of this five-year period. The approval will remain in effect pending EPA's review of the extension request. EPA would reserve the right to modify or revoke the approval based on new information available to EPA that provided a basis to conclude that the activities covered by the approval pose an unreasonable risk to human health or the environment.

II. Approval of this Application Will Result in No Unreasonable Risk

The disposal of < 50 ppm PCB Remediation Wastes in the manner specified in this application will pose no "unreasonable risk of injury to health or the environment." *See* 40 C.F.R. § 761.61(c)(2). TSCA requires that EPA's PCB regulations, including the authorization of disposal of < 50 ppm PCB Remediation Wastes generated under 40 C.F.R. § 761.61(a) in non-TSCA units such as MSWLFs, be based on a finding of "no unreasonable risk." *See* 15 U.S.C. § 2605(e); 40 C.F.R. § 761.61(a)(5)(i)(B)(2)(ii); *see also* 63 Fed. Reg. 35384, 35385 (June 29, 1998) ("Under TSCA section 6(e), EPA makes decisions using the concept of 'unreasonable risk'"). Indeed, all of the PCB regulations, including the provision in § 761.61 allowing for PCB Remediation Wastes to be disposed of based on their "as-found" concentrations of PCBs, are based on a finding by EPA that such regulations will "not present an unreasonable risk of injury to health or the environment." TSCA § 6(e)(2)(B), 15 U.S.C. § 2605(e)(2)(B).

In a report prepared by EPA's Office of Pollution Prevention and Toxics to support the current PCB rules allowing for < 50 ppm PCB Remediation Wastes to be managed in non-TSCA units, the Agency again determined that such disposal would be protective of human health and the environment. In that report, EPA explained that:

> The proposed regulation makes a number of changes in disposal requirements for remediation wastes: Wastes would be regulated on "as found" basis, instead of according to the original concentration of materials ... Wastes may be disposed *in the minimum technique necessary to protect human health and the environment*. Since much PCB remediation wastes are found in low concentrations (*including large quantities of wastes found in concentrations of less than 50 ppm*),

> substantial quantities will be disposed of in municipal solid waste landfills.

"Final Report: Costs of Compliance with the Proposed Amendments to the PCB Regulation," at 4-104 (December 6, 1994) (emphasis added) (excerpt attached hereto as Attachment C).

As evidenced by this report and by many provisions of the existing PCB regulations, EPA has already made the determination that PCBs at concentrations below 50 ppm do not pose an unreasonable risk to human health or the environment. Providing authorization to dispose of the PCB Remediation Wastes covered by this application in the same manner will therefore remove an unnecessary regulatory burden and promote voluntary cleanups in a manner that does not jeopardize human health or the environment.

* * * * *

Since TSCA's enactment and the subsequent promulgation of the PCB regulations, electric and natural gas utilities have remained steadily engaged with EPA in an effort to maintain compliance with the PCB regulations while managing PCB-containing equipment and wastes in a cost-effective manner that ensures reliable and safe service to the rate-paying public. The approval of this application will promote cleanups and facilitate compliance in a manner that does not present an unreasonable risk of injury to health or the environment while maintaining cost-effective and prudent disposal measures for this waste. Because EPA has already determined in the context of similarly situated parties managing identical PCB wastes that the management of < 50 ppm PCB Remediation Wastes in non-TSCA units does not pose an unreasonable risk of injury to health or the environment, the Agency should make the same finding here and grant this application pursuant to 40 C.F.R. § 761.61(c).

Thank you for your consideration. If you have questions regarding this application, please contact the undersigned or USWAG counsel Douglas Green (202-344-4483) or Allison Foley (202-344-4416) at Venable LLP.

Very truly yours,

James Roewer
Executive Director

Attachments

cc: David Hockey, ORCR, USEPA

Attachment A

Utility Solid Waste Activities Group

Current Members[1]
(as of April 4, 2012)

AES Corporation
ALLETE
Alliant Energy Corporation
Ameren Corporation
American Electric Power Company
American Transmission Company LLC
Arizona's G&Ts
Aurora Energy LLC
Avista Corporation
Birchwood Power Partners
Buckeye Power Inc.
CenterPoint Energy, Inc.
Central Hudson Gas & Electric Corporation
Cleco Corporation
Consolidated Edison, Inc.
CMS Energy Corporation
Dairyland Power Cooperative
Dominion
DTE Energy Company
Duke Energy
Duquesne Light Company
Dynegy
Entergy Corporation
Exelon
FirstEnergy Corp.
GenOn Energy Inc.
Great Plains Energy, Inc.
Great River Energy
Hoosier Energy Rural Electric Cooperative, Inc.
Iberdrola USA
Integrys Energy Group
Los Angeles Department of Water & Power
Luminant
Madison Gas and Electric Company
Memphis Light, Gas, and Water Division
MidAmerican Energy Holdings Company
Montana-Dakota Utilities Co.
National Grid

[1] This includes member companies' operating subsidiaries engaged in the generation/production, transmission, or distribution of electricity, natural gas, or other energy resources.

New York Power Authority
NextEra Energy, Inc.
NiSource, Inc.
Northeast Utilities Service Company
NRG Energy, Inc.
NSTAR
OGE Energy Corporation
Ohio Valley Electric Corporation
Oncor Electric Delivery
Pacific Gas & Electric Company
Pepco Holdings, Inc.
Pinnacle West Capital Corporation
PNM Resources, Inc.
Portland General Electric
PPL Corporation
Prairie State Generating Company, LLC
Progress Energy
Public Service Enterprise Group, Inc.
Puget Energy, Inc.
Salt River Project
SCANA Corporation
Sempra Energy
Southern California Edison Company
Southern Company Services, Inc.
Sunflower Electric Power Corporation
TECO Energy
Tennessee Valley Authority
Tri-State Generation & Transmission
Unisource Energy Corporation
Vectren Corporation
Wabash Valley Power Association
We Energies
Westar Energy Inc.
Wolf Creek Nuclear Operating Corporation
Xcel Energy, Inc.

Attachment B

**** NOTIFICATION FORM ****

Submit via fax or certified mail.

If providing notification via telephone, complete and retain copy of notification form for company records.

In accordance with the 40 CFR §761.61(c) risk-based EPA approval issued on _____, 2012, to USWAG to dispose of PCB Remediation Wastes containing as found < 50 ppm PCBs, the following information is provided.

A. COMPANY IDENTIFICATION:

Name: _____

Address: _____

_____

Primary Contact Name: _____

Primary Contact Phone: _____

Holding Company (if applicable): _____

B. CLEANUP SITE LOCATION:

Address: _____

City, County, State, Zip _____

_____ _____

Date submitted Submitted to

_____ _____

Submitted by (signature) Submitted by (print name)

Date of notification by phone (if applicable): _____

Notification submitted by phone to: _____

(EPA contact name and title)

Attachment C

660094

B_2-014

FINAL REPORT

253PP

COSTS OF COMPLIANCE WITH THE PROPOSED AMENDMENTS TO THE PCB REGULATION

December 6, 1994

Nishkam Agarwal
Regulatory Impacts Branch
Economics, Exposure and Technology Division
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
Washington, DC 20460

Elizabeth Festa Watson
PCB x IC
1/4/95

Cost Savings from Changes in Technical Disposal Requirements

Cost savings are generated by the difference between current disposal costs and those generated when the wider set of options under the proposed regulation are considered. Data on the total quantity of remediation waste was compiled and then the differential disposal requirements under the existing and proposed regulations were examined.

Remediation waste includes wastes from National Priority List (NPL) sites, CERCLIS sites, RCRA Corrective Action sites, TSCA Enforcement Sites, and from private cleanup operations undertaken without government involvement. Table 4-8 summarizes the quantity estimates for each category of waste, and the range of uncertainty around each quantity estimate. As noted in the Table 4-8, the best information is available about the NPL sites and very little is known about the extent of any private inventory of waste sites that are not recognized in any of the other totals. The total quantity of PCB waste was estimated at 525.0 million tons, with the possible range of the estimate defined as 227.3 million tons to 822.8 million tons.

525.10^6
2,000
1,050,000 million
1 trillion pounds

The proposed regulation makes a number of changes in disposal requirements for remediation wastes:

- Wastes would be regulated on an "as found" basis, instead of according to the original concentration of materials. This change allows much more waste to be disposed of using techniques less stringent than chemical landfilling or incineration.
- Liquid wastes would be regulated in the same manner as nonliquid wastes; Because liquid PCB wastes are currently regulated more strictly, this change reduces the stringency of the disposal requirements.
- Wastes may be disposed in the minimum technique necessary to protect human health and the environment. Since much PCB remediation wastes are found in low concentrations (including large quantities of wastes found in concentrations of less than 50 ppm), substantial quantities will be disposed in municipal solid waste landfills. Other PCB-contaminated soils will be subjected to washing technologies and replaced on site, eliminating the need to identify off-site disposal capacity.

The new regulatory language will allow a portion of the wastes now incinerated to be disposed by chemical waste landfills, and for a portion of the wastes disposed by chemical waste landfills to be disposed in municipal waste landfills. Additionally, the change in disposal

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TABLE 4-8

ESTIMATED VOLUMES OF REMEDIATION WASTES

Source of Remediation Wastes	Estimated Volume (millions of tons)	Range of Uncertainty	Low Estimate	High Estimate	Comments	Source(s)
NPL Sites	34.0	+/- 25%	25.5	42.5	Based on existing data indicating 20 percent of 1,218 sites contain PCB contamination.	U.S. EPA, 1991a
CERCLIS Sites	288.0	+/- 50%	144.0	432.0	Estimate based on PCB contamination at 7 percent of sites; assumes same per-site rate of PCB contaminated and waste volumes as for NPL sites (approx. 140,000 tons per site).	U.S. EPA, 1991b/ Project estimate
RCRA Corrective Actions	27.5	+/- 50%	13.8	41.3	Estimate assumes a similar PCB volume for RCRA Corrective Action sites as for NPL sites; 250-300 of these sites have PCBs.	OPPT
TSCA Enforcement Sites	0.5	+/- 50%	0.3	0.8	Estimate assumes TSCA enforcement sites are on average 1,000 tons per site for approximately 500 sites.	Project estimate
Private Cleanup Operations	175.0	+/- 75%	43.8	306.3	Estimated to equal one-half of all government-supervised cleanup operations	Project estimate
Total	525.0		227.3	822.8		

requirements will expand use of various alternative disposal techniques which, under the present requirements are not sufficiently effective to meet the more stringent incineration standard. The effects of the regulation among various cleanup sites can vary substantially. Nevertheless, the cost effect can be summarized as two questions, the share of remediation wastes for which disposal methods will be changed, and the average cost differential for the change in disposal methods.

Table 4-9 summarizes a selection of the cost estimates obtained for the disposal options. The cost estimates for a given technique can vary widely depending upon the circumstances of disposal, the cleanup level being targeted, and the source of the estimates. For example, as the table indicates, incineration costs can vary from several hundred to several thousand dollars per ton. Incineration costs have been quoted as high as $2,300 per ton. The actual incineration costs for an individual site (and a given incineration job), however, can vary substantially depending upon the waste characteristics and combustibility. Chemical waste landfill costs can also vary widely. Transportation costs can add $100 to $200 per ton in many cases. Costs also vary, for example, state by state depending upon the level of State taxes placed on PCB waste disposal. In some cases State and local taxes can exceed $100 per ton. As noted in Table 4-9, chemical waste landfilling costs can vary from under $100 per ton to as high as $600 per ton.

To compare costs of disposal under the existing and proposed regulations, the waste quantities must be distributed across the disposal options and then an aggregate cost of disposal is calculated. There is, however, insufficient data to distribute wastes across these options under the existing regulation. Similarly, there is little basis for projecting the disposal choices under the proposed amendments since many of the alternative options have not been used extensively.

The potential cost savings clearly could be quite large at many sites, including some of the largest Superfund sites. At sites where incineration would no longer be required, the cost savings could be above $1,000 per ton. To date, slightly more than one-half of the wastes disposed from the National Priorities List sites have been classified as industrial sludges and have been designated for incineration. Additional large volumes of wastes now sent to chemical waste landfills will now be sent to municipal or industrial solid waste landfills, where average savings could be several hundred dollars per ton or more. Disposal costs for some wastes could

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TABLE 4–9

COSTS OF METHODS TO ADDRESS PCB–CONTAMINATED MATERIALS

Cleanup Method	Cost per ton (a) Range	Source(s) (b)	Comments
Incineration	$2,300	Oberacker, 1992	Involves fixed incineration facilities; upper bound on incineration costs
	$500–800	EPA Record of Decision for Bridgeport, CT, Superfund site, other sources	Assumes using a mobile incinerator
	$200–900	Oberacker, 1992	Assumes using a mobile incinerator
	$250–300	Kinder, 1992	Assumes using a mobile incinerator
Chemical Waste Landfilling	$200–600	Price quotes for small volume disposal	Chemical waste landfills
	$70–90	Kinder, 1992 Applicable to large volumes	Chemical waste landfills
Thermal Processing	$180–240	EPA SITE Newsletter, 11/89	Shirco Infrared Electric Thermal Processing No full–scale operation
Dechlorination	$300–500	Rogers, 1992	KPEG reagents
	$245	Rogers, 1992	BCD (base–catalyzed dechlorination)
	$400–800	Kinder, 1992	
Biodegradation	$200–600	Kinder, 1992	No full–scale operation
Muni., indus. solid waste landfill	$45	Horton Landfill, Springfield, VA	Disposal like any muni., indus. solid waste

(a) Costs include (unless otherwise specified) design, construction, operating, maintenance, monitoring, evaluation, and disposal.
(b) Sources refer to persons contacted during preparation of this study. See the reference list at end of this Section for the complete reference.

be unaffected, however, such as if the waste is quite hazardous and continues to require incineration.

To develop the necessary cost estimates, it was necessary to estimate the average cost savings per ton. The range of the cost differentials will be quite wide, and average savings could range from $200 to $800 per ton. A conservative estimate of $400 per ton was used for the overall estimated cost savings. (Some estimates of cost differentials among disposal techniques indicate that the potential cost savings could be much higher. See U.S. Department of the Navy, 1991.)

Given the estimated range of waste quantities, the duration of cleanup efforts and the average annual cost savings generated by the proposed amendments is dependent upon the annual rate of cleanup. Historically, the average annual rate of remediation and waste disposal at NPL sites amounts to approximately 1 million tons per year of contaminated soil and contaminated solid waste.[10] Since only a portion of this waste contains PCBs, the rate specific to PCBs would be lower. This estimate does not capture, however, cleanup operations at CERCLIS sites or private cleanup operations not included in the government inventory of sites.

The rate of remediation should increase considerably, however, with the liberalization of disposal and administrative requirements under the proposed amendments. Technological advancements should improve the speed and efficiency of cleanup operations. Further, since cleanup operations are certain to take at least several decades, the role of technological change is likely to be quite important. It remains, however, very speculative to estimate how great an increase in remediation rates should occur. Order-of-magnitude increases might be possible, but cannot be assumed.

[10]The estimate is based on data derived from the EPA publication, Superfund Progress, Spring, 1992. Superfund data shows the quantity of waste remediated or disposed at NPL sites during throughout the history of Superfund (1980-1991) at 4.13 million cubic yards of contaminated soil, 5.27 million cubic yards of contaminated solid wastes, and additional quantities of contaminated liquid waste, groundwater and surface water. Summing the soil and solid waste quantities, and dividing by the twelve year history represented, the average annual rate of disposal is 0.78 million cubic yards per year. Judging that a cubic yard of soil would weigh in the vicinity of 2,700 lbs., this calculates to 1.05 million tons per year.

Table 4-10 presents the range of estimates of the time required to remediate the inventory of PCB wastes, as defined by a hypothetical range of remediation rates (millions of tons remediated per year). Given the uncertainty in the estimates, the range of duration and the range in annual cost savings is extremely large. At one extreme, combining the high-end estimate of waste quantities and the lowest rate of remediation, the cleanup will require over 100 years. At the other extreme, which combines the low range estimate of waste quantities and the highest remediation rate considered, cleanup would require just over a decade.

Table 4-10 also presents the total annual cost savings generated using the estimated average savings of $400 per ton. At the lowest cleanup rate considered of 5 million tons per year, the annual cost savings is $2 billion per year. At the highest cleanup rate shown, the savings would be $6 billion per year. For a given annual rate of remediation, these cost savings would be generated over a time period determined by the quantity of PCB waste to be remediated. An estimated cost savings of $4 billion per year is used in the final cost totals.

Remediation waste also is being generated from dredged material disposal sites, such as the Indian Harbor site in the Great Lakes and elsewhere. Most dredged material sites with PCB-contamination do not reach the 50 ppm level of contamination, and most of the sites that do reach this level are being addressed as Superfund sites and these wastes, therefore, are included in the estimates for Superfund wastes. For the remaining sites that have PCB contamination at 50 ppm or greater regulated only under TSCA, the proposed amendments might reduce disposal costs. EPA is currently allowing these wastes to be treated by using alternative treatment methods; under the proposed regulation, they now may be disposed of under revised, risk-based disposal standards. The effect of this change on disposal costs, however, could not be estimated without case-by-case information on the new disposal sites and the probable risk-based disposal standards that would be applied. A cost savings could also result if the proposed amendments, by clarifying requirements, reduces the administrative and legal preparations needed before disposal can occur. The significance of such changes, while probably quite significant, could not be specified. Therefore, dredged material wastes and the potential cost savings generated under the proposed amendments have not been included in the analysis.

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TABLE 4-10

SENSITIVITY ANALYSIS

DERIVATION OF NUMBER OF YEARS
AND ANNUAL COST SAVINGS
FOR CLEANUP OF PCB WASTES

Remediation Quantity/Yr (millions of tons)	Total Remediation Waste Quantities (millions of tons)				Annual Cost Savings(a)
	Low Est. 168	300	450	High Est. 597	
		(Years)			
5	34	60	90	119	$2,000
10	17	30	45	60	$4,000
15	11	20	30	40	$6,000

(a) Annual cost savings are calculated at $400 per ton, times the annual rate of remediation